

SUBTILEX® L

A Liquid Biological Fungicide

SEED TREATMENT FOR
COTTON AND SOYBEAN;
IN-FURROW TREATMENT FOR PEANUT

ACTIVE INGREDIENT:

Bacillus subtilis, MBI 600 (not less than 2.2 X 10¹⁰ viable spores per ml).. 0.18%
Other ingredients:..... 99.82%
TOTAL:..... 100%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See Additional Precautionary Statements on
Side (Back) Panel

EPA Reg. No. 71840-5 EPA Est. No. _____

U.S. Patent No. 5,061,495

U.S. Patent No. 5,344,647

Canada Patent No. 1,524,099

Another quality biological product from:

Becker Underwood
801 Dayton Avenue
PO Box 667
Ames, IA 50010
Tel. 515-232-5907 800-232-5907
www.beckerunderwood.com

Net Contents: _____ Batch Code: _____
SUBTILEX is a Reg. TM of Becker Underwood, Inc.
Bacillus subtilis, MBI 600 strain is a product of Becker Underwood, Inc.

FIRST AID	
If on skin or clothing:	- Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15 - 20 minutes - Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
CAUTION: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE):
Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves and shoes plus socks. As a general precaution when exposed to concentrations of living microbial products such as this, all mixers / loaders and applicators must wear a dust / mist filtering respirator meeting NIOSH standards of at least N-95, R-95 or P-95. Follow manufacturer's instructions for cleaning / maintaining PPE. Keep and wash PPE separately from other laundry.

User Safety Requirements:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove PPE immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards:
Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public water unless this product is specifically identified and addressed in a NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment authority. For guidance, contact your state water Board or Regional Office of the EPA.

For Seed Treatment: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment washwater. Do not apply this product while bees are actively visiting the area.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions for exceptions pertaining to the statements in this labeling about PPE, restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).
Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 0 hours.
PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is coveralls, waterproof gloves and shoes plus socks.

SUBTILEX® L contains bacteria, which colonize on the developing root system, suppressing disease organisms such as *Fusarium*, *Rhizoctonia*, and

ACCEPTED
NOV 4 2004
Under the Federal Insecticides, Fungicides, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 71840-5

71840-5

11/04/2004

13

Alternaria that attack root systems. When used with a chemical seed treatment, the combination of chemicals and SUBTILEX® L provides protection to the root for a much longer time than with chemicals alone. As the root system develops, the bacteria grow with the roots extending the protection throughout the growing season. As a result of this biological protection, a vigorous root system is established by the plant, which often results in more uniform stands and greater yields.

In addition, SUBTILEX® L has been shown to increase the amount of nodulation by nitrogen-fixing bacteria when used on many legumes. This improvement in nodulation is a result of a healthier root system allowing more sites for nodules to form from inoculated or naturally occurring soil borne nitrogen-fixing bacteria.

FOR USE AS A SEED TREATMENT

SUBTILEX® L may be diluted with water and applied directly to dry seed or mixed with liquid *Rhizobium* inoculants and/or other registered seed treatment insecticides and fungicides. Do not store mixtures of SUBTILEX® L and agrochemicals for longer than 72 hours.

COTTON

For suppression of *Rhizoctonia* and *Fusarium* seedling diseases, and *Fusarium* wilt, apply at 70 mL/100 lbs of delinted cotton seed as a planter box treatment. May be diluted with water to achieve improved application coverage to the seed. Please consult manufacturer for additional information.

SOYBEANS

For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for improvement of nodulation by *Bradyrhizobium japonicum*, combine with inoculant products (i.e., Becker Underwood's VAULT). Apply 0.14 fl. oz. (4 mL) of SUBTILEX® L per 100 lbs of soybeans or in combination with *bradyrhizobium japonicum* inoculant to improve nodule formation. For example, apply 100 mL of SUBTILEX® L plus 3.1

liters of the previously mentioned inoculant products to 2500 lbs of seed.

Please note that the inoculant range may change with unforeseen improvements and concentration changes.

SEED AND POD VEGETABLES: (such as) green beans, snap beans, lima beans, kidney beans, navy beans, pinto beans, wax beans, pole beans, garden peas, peas and field beans: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply 0.25-1.0 ounces per 100 lbs of seed. For improvement of nodulation by *Rhizobium* in fields where appropriate strains are detectable, apply at 0.25 – 0.5 ounces per 100 lbs. of seed.

ALFALFA, FORAGE AND TURF GRASSES:

For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, and for stimulation of germination and plant vigor, apply at a rate of 0.1 - 5.0 ounces (large – small seed varieties respectively) per 100 lbs. of seed as a dry blend, or mixed with other registered seed treatments or liquid seed coating agents.

WHEAT AND BARLEY: For suppression of root diseases caused by *Rhizoctonia* and *Fusarium*, apply 0.05-0.25 ounces per 100 lbs of seed.

CORN: (Field and Sweet) For suppression of root disease caused by *Fusarium* and *Pythium*, apply 0.25-1.0 ounces per 100 lbs of seed.

CHEMIGATION

Do not apply this product through any type of irrigation system.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not contaminate water by cleaning of equipment or disposal wastes.

STORAGE: Store in a dry place.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed on site, or at an approved waste disposal facility.

CONTAINER DISPOSAL: Completely empty container, and rinse residue into mixing equipment. Then dispose of container in a sanitary landfill or by incineration if allowed by State and local authorities. Dispose of box in the same manner. Do not reuse container or box.

FOR USE AS AN IN-FURROW TREATMENT

PEANUTS: Apply SUBTILEX® L concentrate at 0.1–1.2 fl. oz. per acre (3–36 ml per ha.) following the application procedures listed below:

SUBTILEX® L may be applied as a water-based suspension with other in-furrow treatments (including Becker Underwood liquid inoculants, i.e. VAULT *Rhizobium* Inoculant etc.) via standard application equipment.

CAUTION: If *Rhizobium* inoculants are to be used in the tank mix with other in-furrow treatments (fungicides, insecticides, nematicides, fertilizers and etc.) make sure that they are compatible (not harmful) to the *Rhizobium*. It is also very important that you use only chlorine free water in the tank mix. If one or more in-furrow treatments are not compatible (harmful) they should be mixed in and applied from a separate mix tank

To mix, first add the in-furrow treatment(s) and or the *Rhizobium* liquid inoculant to the mix tank with approximately ½ of the required water. Slowly add the SUBTILEX® L to the slurry until a uniform suspension is obtained. Add the remainder of the water and maintain constant agitation throughout

the application. Apply the slurry at 5-20 gallons per acre. Do not store mixed slurries for longer than 72 hours.

NOTICE - READ CAREFULLY CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Becker-Underwood, Inc. warrants that this product conforms to the specifications on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Becker-Underwood, Inc. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use: It is impossible to eliminate all risks associated with use of this product. Lack of performance, injury, or other unintended consequences may result because of such factors as use of the product contrary to strict label instructions and established safe practice, abnormal conditions (such as excessive rainfall, drought, and Acts of God), presence of other materials, use in combination with other materials, the manner of application, or other factors, all of which are beyond the control of Becker-Underwood, Inc. or the seller. All such risks shall be assumed by the buyer.

Limitation of Remedies: The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Becker-Underwood, Inc's election, one of the following: (1) replacement of the amount of product used; or (2) refund of the purchase price paid for the product. Becker-Underwood, Inc. shall not be liable for losses or damages resulting from handling, storage, or use of this product unless Becker-Underwood, Inc. is promptly notified of such loss or damage in writing. In no case shall Becker-Underwood, Inc. be liable for consequential or incidental damages or losses. Becker-Underwood, Inc. neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale, storage, use, or handling of this product other than expressly set forth herein.